UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Offico Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

NOTICE OF ALLOWANCE AND FEE(S) DUE

7590

02/26/2002

SCHWEGMAN, LUNDBERG, WOSSNER & KLUTH, P.A. P.O. BOX 2938 MINNEAPOLIS, MN 55402 EXAMINER

LANDSMAN, ROBERT S

ART UNIT CLASS-SUBCLASS

530-350000

1647
DATE MAILED: 02/26/2002

APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 08/955,572 10/22/1997 BYOUNG S. KWON IND4-DI1B 7472

TITLE OF INVENTION: HUMAN H-4-1BB PROTEIN

TOTAL CLAIMS	APPLN. TYPE '	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
9	nonprovisional	- NO.	\$1280	\$0	\$1280	05/28/2002

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED.</u> THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above. If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

B. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.

 Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.



PART B - FEE(S) TRANSMITTAL



Complete and mail this form, together with applicable fee(s), to:

Box ISSUE FEE

Assistant Commissioner for Patents

Washington, D.C. 20231

MAILING INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 4 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

7590 02/26/2002 SCHWEGMAN,LUNDBERG,WOSSNER & KLUTH,F P.O. BOX 2938 MINNEAPOLIS, MN 55402			TH,P.A.	Note: The certificate of mailing below can only be used for mailings of the Fee(s) Transmittal. This certificate cannot be used other accompanying papers. Each additional paper, such as an assor formal drawing, must have its own certificate of mailing. Certificate of Mailing I hereby certify that this Fee(s) Transmittal is being deposited United States Postal Service with sufficient postage for first class nenvelope addressed to the Box Issue Fee address above on indicated below.			
			_			(Depositor's name)	
			<u></u>			(Signature)	
			L_			(Date)	
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTORNEY DOCKET NO.	CONFIRMATION NO.	
08/955,572	10/22/1997		BYOUNG S. KWON		IND4-DI1B	7472	
TOTAL CLAIMS	APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FE	E TOTAL FEE(S) DUE	DATE DUE	
9	nonprovisional	NO	\$1280	\$0	\$1280	05/28/2002	
	MINER N, ROBERT S	ART UNIT	CLASS-SUBCLAS 530-350000	SS			
1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). Use of PTO form(s) and Customer Number are recommended, but not required. □ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. □ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47) attached.			the names of up to or agents OR, alto single firm (havin attorney or agent) registered patent at	2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.			
PLEASE NOTE: Unle	ss an assignee is identifited to the USPTO or is b	eing submitted under sepa	a will appear on the pate	ent. Inclusion of assi of this form is NOT a	gnee data is only appropriat a substitute for filing an assig NTRY)	e when an assignment has nment.	

☐ Issue Fee ☐ Payment by credit card. Form PTO-2038 is attached. ☐ Publication Fee The Commissioner is hereby authorized by charge the required fee(s), or credit any overpayment, to ☐ Advance Order - # of Copies (enclose an extra copy of this form). Deposit Account Number _ The COMMISSIONER OF PATENTS AND TRADEMARKS is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above. (Authorized Signature) (Date)

☐ A check in the amount of the fee(s) is enclosed.

4b. Payment of Fee(s):

NOTE; The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Please check the appropriate assignee category or categories (will not be printed on the patent)

4a. The following fee(s) are enclosed:

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending on the needs of the individual case. Any comments on the amount of time required to complete this form should be sent to the Chief Information Officer, United States Patent and Trademark Office, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND FEES AND THIS FORM TO: Box Issue Fee, Assistant Commissioner for Patents, Washington, D.C. 20231

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

☐ individual ☐ corporation or other private group entity ☐ government



United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
08/955,572	10/22/1997	BYOUNG S. KWON	IND4-DI1B	7472	
7:	590 02/26/2002		EXAMIN	ER	
SCHWEGMAN,LUNDBERG,WOSSNER & KLUTH,P.A. P.O. BOX 2938 MINNEAPOLIS, MN 55402			LANDSMAN, ROBERT S		
			ART UNIT	PAPER NUMBER	
			1647		
			DATE MAILED: 02/26/2002		

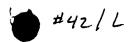
Determination of Patent Term Extension under 35 U.S.C. 154 (b) (application filed after June 7, 1995 but prior to May 29, 2000)

The patent term extension is 0 days. Any patent to issue from the above identified application will include an indication of the 0 day extension on the front page.

If a continued prosecution application (CPA) was filed in the above-identified application, the filing date that determines patent term extension is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system. (http://pair.uspto.gov)





2-22-02 BL

	Application No.	Applicant(s)			
• •	08/955,572	KWON, BYOUNG S.			
Notice of Allowability	Examiner	Art Unit			
	Robert Landsman	1647			
4	Robert Lanusman	1047			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.					
1. 🔯 This communication is responsive to <u>Amendment K</u> .					
2. The allowed claim(s) is/are 5,6,24 and 26-31.					
3. The drawings filed on are accepted by the Examine		•			
 4. ☐ Acknowledgment is made of a claim for foreign priority und a) ☐ All b) ☐ Some* c) ☐ None of the: 	ler 35 U.S.C. § 119(a)-(d) or (f).				
 Certified copies of the priority documents have 	been received.				
Certified copies of the priority documents have	been received in Application No	·			
Copies of the certified copies of the priority do	cuments have been received in this r	national stage application from the			
International Bureau (PCT Rule 17.2(a)).					
* Certified copies not received:					
5. Acknowledgment is made of a claim for domestic priority ur		onal application).			
(a) The translation of the foreign language provisional a					
6. Acknowledgment is made of a claim for domestic priority ur	ider 35 0.5.C. 99 120 and/or 121.				
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.					
7. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.					
8. CORRECTED DRAWINGS must be submitted.					
(a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached					
1) hereto or 2) to Paper No					
(b) including changes required by the proposed drawing correction filed, which has been approved by the Examiner.					
(c) 🔲 including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No					
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the top margin (not the back) of each sheet. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.					
9. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.					
Attachment(s)					
1 Notice of References Cited (PTO-892)	2 ☐ Notice of Informa	l Patent Application (PTO-152)			
3 Notice of Draftperson's Patent Drawing Review (PTO-948)	4 Interview Summary (PTO-413), Paper No				
5☑ Information Disclosure Statements (PTO-1449), Paper No. <u>40</u> 7☐ Examiner's Comment Regarding Requirement for Deposit		ndment/Comment ment of Reasons for Allowance			
of Biological Material	9☐ Other .	ment of reasons for Allowance			
		I I			

#42/L

2-22-02 Pec

Page 2

Application/Control Number: 08/955,572

Art Unit: 1647

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Janet Embretson on February 22, 2002.

In the specification:

Replace the first line of the specification with the following:

This application is a continuation of U.S. Application Serial No. 08/461,652, filed June 05, 1995, now abandoned, which is a divisional of U.S. Application Serial No. 08/122,796, filed September 16, 1993, now abandoned.

In the claims:

Replace claim 5 with the following:

1 7

A protein produced by:

- (a) introducing an expression vector into an appropriate host cell to yield a recombinant host cell, wherein said expression vector comprises a DNA encoding a protein having SEQ ID NO:2, or an extracellular fragment thereof which binds H4-1BBL.
- (b) growing said cell of step (a) in appropriate culture media; and
- (c) purifying the protein, or the fragment thereof.

In claim 6, after the phrase "extracellular domain of SEQ ID NO:2" add "and which binds H4-1BBL.

37

<u>L</u>

#42/6

2-22-02 BL

Page 3

Application/Control Number: 08/955,572

Art Unit: 1647

In claim 24, delete the term "soluble"

In claim 24, replace the phrase "is capable of specifically binding a cell membrane ligand for SEQ ID NO:2" with "binds H4-1BBL."

In claim 26, delete the term "soluble"

Replace claim 27 with the following:

5 M.

An H4-1BB protein produced by:

- (a) introducing an expression vector into an appropriate host cell to yield a recombinant host cell wherein said expression vector comprises a DNA molecule encoding the extracellular domain portion of the H4-1BB protein having SEQ ID NO:2, or a fragment of the extracellular domain which binds H4-1BBL; and
- (b) recovering the protein from the host cell.

In claim 28, delete the phrase ", SEQ ID NO:7, or SEQ ID NO:8"

In claim 29, delete the term "soluble"

In claim 30, delete the phrase ", SEQ ID NO:7, or SEQ ID NO:8"

GARY L. KUNZ

SUPERVISORY PATENT EXAMPLE

TECHNOLOGY CENTER 1000

38

1